

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

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In the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE)
COMMISSION OF THE APPLICATION OF THE)
FUEL ADJUSTMENT CLAUSE OF KENTUCKY) CASE NO. 8590
UTILITIES COMPANY FROM NOVEMBER 1,)
1980, TO OCTOBER 31, 1982)

INTERIM ORDER

Pursuant to 807 KAR 5:056, Sections 1(11) and 1(12), the Public Service Commission ("Commission") issued its Order on August 23, 1982, scheduling a hearing to review the operation of the fuel adjustment clause of Kentucky Utilities Company ("KU") for the period from November 1, 1980, to October 31, 1982, and to determine the amount of fuel cost that should be in the base rates in order to reestablish the fuel clause charge pursuant to 807 KAR 5:056, Section 1(2).

In response to the Commission's requests for information, KU proposed to use May 1982 as the base period (test month) for the purpose of arriving at the base fuel cost [F(b)] and the KWH sales [S(b)] components of the fuel adjustment clause. The base fuel cost proposed by KU was 20.86 mills per KWH. KU provided all requested information, and following proper notice, a hearing was held on January 24, 1983.

The sole intervenor in this case was the Consumer Protection Division of the Attorney General's Office ("AG").

The AG did not offer testimony, and on cross-examination did not challenge the level of actual fuel cost included in KU's monthly fuel filings, or the proposed base fuel cost of 20.86 mills per KWH.

In establishing the appropriate level of base fuel cost to be included in KU's rates, the Commission must determine whether the proposed base period fuel cost per KWH is representative of the level of fuel cost being experienced by KU as of the end of the 2-year period under review. The Commission's review of the test month (May 1982) selected by KU revealed that KU applied an expected "moderate cost" inflation rate of 7 percent per year to the average fuel expense incurred during the year ended October 31, 1982, producing an expected average fuel cost for the next 2 years of 21.12 mills per KWH. K.U. selected the fuel cost of 20.86 mills per KWH for May 1982 since it was the most recent month which approximated the expected average fuel cost. The Commission is of the opinion that the purpose of the fuel adjustment clause is to allow electric utilities to recover increased fuel costs that have been incurred. Therefore, the base period (test month) fuel cost selected should be representative of the current level of fuel cost without consideration of future increases due to anticipated inflation.

During May 1982 KU's Ghent I unit was available and operated only 17.8 percent of the month (approximately 132 hours out of 744 hours during the period). Consequently, the

lost generation from this low cost unit had to be replaced with higher cost generation within KU's system and with purchases outside the system. Therefore, the Commission is of the opinion that these factors significantly affected KU's fuel costs during the month of May 1982, and the proposed base fuel cost of 20.86 mills per KWH is not representative of the level of fuel cost being experienced by KU as of the end of the 2-year period under review.

The Commission's analysis of KU's monthly fuel clause filings shows that the actual fuel cost incurred for the year ended October 1982 ranged from a low of 17.62 mills per KWH in October 1982 to a high of 21.24 mills per KWH in April 1982, and the 12-month average was 19.07 mills per KWH. Considering the last six months under review, the month with a fuel cost closest to this average is July 1982, with a fuel cost of 18.91 mills per KWH. The Commission's review of KU's generation mix, unit outages and unit availability discloses that July 1982 was a reasonably representative generation month for KU.

The Commission finds that July 1982 is a reasonably representative month to use in calculating the base fuel cost [F(b)] and the KWH sales [S(b)] components of the fuel adjustment clause, and that the fuel cost of 18.91 mills per KWH for July 1982 is representative of the fuel cost being incurred as of the end of the 2-year period under review.

KU bills its customers on a daily cycle basis. In Case No. 8057, An Examination by the Public Service

Commission of the Application of the Fuel Adjustment Clause of Kentucky Utilities Company Pursuant to 807 KAR 5:056, Sections 1(11) and (12), the Commission determined that a transfer (roll-in) of fuel costs into the base rates would result in KU not being able to bill all of the increase in fuel costs for the 2 months immediately preceding the first month the new base fuel cost is billed. The Commission will explain the problem of under-recovery due to the roll-in of the new base fuel cost with the following illustration:

Two assumptions must be made for this illustration. First, assume the Commission approves the roll-in of a base fuel cost of 18.91 mills per KWH effective for bills rendered on and after September 1, 1983. Second, assume that the actual fuel costs for July and August of 1983 are 19.00 and 19.50 mills per KWH, respectively. Since one-half of July sales are billed in July and the other one-half are billed in August, the base fuel cost of 15.33 mills per KWH would apply to both months. Thus, the applicable fuel adjustment clause rate for July would be 3.67 mills per KWH (19.00 less 15.33) and would be recovered from customers beginning with the first cycle billed in September 1983.

The recovery of August fuel costs is not as easily computed since one-half of the sales billed in August would be subject to the old base fuel cost of 15.33 mills per KWH and the other one-half billed in September would be subject to the new base fuel cost of 18.91 mills per KWH. While a precise calculation cannot be made, in Case No. 8057 the Commission determined that a reasonable solution to this problem would be to average the base fuel cost prior to roll-in of 15.33 mills per KWH and the base fuel cost after roll-in of 18.91 mills per KWH resulting in 17.12 mills per KWH. Thus, the rate for August would be 2.38 mills per KWH (19.50 less 17.12) and would be recovered from its customers beginning with the first cycle billed in October 1983. The Commission is of the opinion that the use of this procedure will eliminate any material impact on KU and its customers due to the roll-in of the new fuel cost into the base rates.

On May 19, 1983, the Commission ordered KU to provide information concerning its coal supply agreements with River Processing, Inc., and South East Coal Company. KU moved the Commission to withdraw its Order, arguing that it would require "KU to express opinions concerning legal and other questions which have been and are issues between KU and other parties" to these agreements. The AG agreed with KU's motion "to the extent that it seeks relief from the data requests." The Commission determined to hold the data requests in abeyance but not to close the docket.

The Commission is of the opinion that the findings with respect to KU's fuel procurement practices which would ordinarily be made at this time also should be held in abeyance and that this Order should be an Interim Order. A final Order will be issued upon conclusion of the Commission's review of KU's fuel procurement practices.

The Commission, having considered the evidence of record and being advised, is of the opinion and finds that:

1. KU's proposed base period fuel cost of 20.86 mills per KWH is not a representative fuel cost for the purpose of setting KU's base fuel cost [F(b)] and should be denied.
2. The month of July 1982 should be used as KU's base period in this proceeding.
3. The establishment of a base fuel cost of 18.91 mills per KWH requires a transfer (roll-in) of .358 cents per KWH from the fuel adjustment clause rate to KU's base rates

and can reasonably be accomplished by an energy adder to each KWH sold.

4. The revised rates and charges in Appendix A are designed to reflect the transfer (roll-in) to base rates of the differential between KU's present base fuel cost of 15.33 mills per KWH and the new base fuel cost of 18.91 mills per KWH found reasonable herein.

5. The rates in Appendix A should be approved for bills rendered on and after September 1, 1983.

6. The fuel adjustment clause rate for July to be billed in September should be computed using the present base fuel cost of 15.33 mills per KWH.

7. The fuel adjustment charge rate for August to be billed in October should be computed using a base fuel cost of 17.12 mills per KWH which is the average of the fuel cost prior to roll-in of 15.33 mills per KWH and the base fuel cost after roll-in of 18.91 mills per KWH.

8. The fuel adjustment clause rate for September and the succeeding months should be computed using the base fuel cost of 18.91 mills per KWH which includes the roll-in of .358 cents per KWH approved herein.

9. KU has complied in all material respects with the calculation and application of its fuel adjustment clause pursuant to 807 KAR 5:056; however, no findings are made at this time with respect to the propriety of KU's fuel procurement practices, which matter should be held in abeyance.

IT IS THEREFORE ORDERED that KU's July 1982 base period fuel cost of 18.91 mills per KWH be and it hereby is approved for use in the calculation of KU's monthly fuel adjustment charge.

IT IS FURTHER ORDERED that KU's proposed base period fuel cost of 20.86 mills per KWH be and it hereby is denied.

IT IS FURTHER ORDERED that the rates in Appendix A be and they hereby are approved for bills rendered by KU on and after September 1, 1983.

IT IS FURTHER ORDERED that the current base fuel cost of 15.33 mills per KWH shall be used to compute the fuel adjustment clause rate for July 1983.

IT IS FURTHER ORDERED that the average base fuel cost of 17.12 mills shall be used to compute the fuel adjustment clause rate for August 1983.

IT IS FURTHER ORDERED that the base fuel cost of 18.91 mills per KWH shall be used to compute the fuel adjustment clause rate for succeeding months.

IT IS FURTHER ORDERED that the matter of KU's fuel procurement practices shall be held in abeyance.

IT IS FURTHER ORDERED that within 30 days from the date of this Order KU shall file with the Commission its revised tariff sheets setting out the rates approved herein.

Done at Frankfort, Kentucky, this 12th day of August,
1983.

PUBLIC SERVICE COMMISSION


Chairman


Vice Chairman


Commissioner

ATTEST:

Secretary

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 8590 DATED AUGUST 12, 1983

The following rates and charges are prescribed for the customers in the area served by Kentucky Utilities Company. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the date of this Order.

RS RESIDENTIAL
Rural and Farm Residential Service*

RATE
Customer Charge \$ 2.75 per month
Plus an Energy Charge of:
5.768 cents per KWH for the first 100 KWH
used per month
5.309 cents per KWH for the next 300 KWH
used per month
4.898 cents per KWH for all in excess of
400 KWH used per month

FERS
Full Electric Residential Service*

RATE
Customer Charge \$ 3.75 per month
Plus an Energy Charge of:
4.955 cents per KWH for the first 1,000 KWH used per month
4.551 cents per KWH for all in excess of 1,000 KWH used per month

GS
General Service*

RATE
Customer Charge \$4.00 per month
Plus Energy Charge of:
7.278 cents per KWH for the first 500 KWH used
per month
6.136 cents per KWH for the next 1,500 KWH used
per month
5.659 cents per KWH for all in excess 2,000 KWH
used per month

C.W.H.
Combination Off Peak Water Heating*

RATE
Customer Charge \$1.00 per month
Plus all energy at 3.369¢ per KWH per month

O.P.W.H.
Off Peak Water Heating*

RATE
Customer Charge \$1.00 per month
Plus all energy at 3.976¢ per KWH per month

Rate 33 - Electric Space Heating Rider*

Rate: 4.610¢ per KWH

Rate 33 - Electric Space Heating Rider - Restricted*

Rate: 4.438¢ per KWH

Rate A.E.S. (All Electric School)*

Rate: 4.613¢ per KWH

IS
INTERRUPTIBLE SERVICE*

RATE
Customer Charge: \$300 per month

Demand Charge:
The firm capacity at: \$9.80 per KVA

Plus the KVA measured in excess of
the firm capacity during the
billing month at:

Subject to 200 hours interruption	\$7.80 per KVA
Subject to 400 hours interruption	\$7.30 per KVA

Plus an Energy Charge of:

2.289 cents for all KWH used in the billing month

L.P.
Combined Lighting and Power Service*

RATE
Maximum Load Charge

Secondary Service at nominal voltages of 120, 240, 480 or 208Y as available.

\$4.21 per kilowatt of the maximum load in the month, but not less than \$505.20 per year.

Primary Service at nominal voltages of 2400, 4160Y, 7200, 8320Y and 12,470Y as available.

\$3.21 per kilowatt of the maximum load in the month, but not less than \$963.00 per year.

Transmission Line Service at voltages of 34,500 or 69,000 as available.

\$3.04 per kilowatt of the maximum load in the month with minimum depending upon the facilities necessary to serve, but not less than \$1,824.00 per year.

Plus an Energy Charge of:

3.512 cents per KWH for the first 500,000 KWH used per month

3.263 cents per KWH for the next 1,500,000 KWH used per month

3.133 cents per KWH for all in excess of 2,000,000 KWH used per month.

Rate HLF (High Load Factor)*

<u>RATE</u>		Secondary	Primary
Maximum Load Charge			
All KW of Monthly Billing Demand		\$5.27 per KW	\$4.91 per KW

Energy Charge: 2.892¢ per KWH for all KWH used.

Rate MP (Coal Mining Power Service)*

RATE
Maximum Load Charge

Primary Service at nominal voltage of 2400 or more--\$3.09 per kilowatt of the maximum load in the month.

Transmission Line Service at nominal voltage of 34,500 or more--\$2.74 per kilowatt of the maximum load in the month.

Plus an Energy Charge of:

3.509 cents per KWH for the first 500,000 KWH used per month

3.159 cents per KWH for all in excess of 500,000 KWH used per month.

Rate M (Water Pumping Service)*

RATE

Customer Charge \$10.00 per month.

1st 10,000 KWH: 5.347 cents per KWH per month.

Over 10,000 KWH: 4.614 cents per KWH per month.

Street Lighting Service Rate*

<u>**Incandescent System</u>		<u>Load/Light</u>	<u>Rate Per Light Per Month</u>	
			<u>Standard</u>	<u>Ornamental</u>
1,000 Lumens (Approximately)		.102 KW/Light	\$ 2.39	\$3.05
2,500 "	"	.201 KW/Light	3.02	3.82
4,000 "	"	.327 KW/Light	4.37	5.31
6,000 "	"	.447 KW/Light	5.83	6.88
10,000 "	"	.690 KW/Light	7.97	9.56

<u>Mercury Vapor</u>				
3,500 Lumens (Approximately)		.126 KW/Light	\$ 5.91	\$ 8.30
7,000 "	"	.207 KW/Light	6.91	9.17
10,000 "	"	.294 KW/Light	8.03	10.03
20,000 "	"	.453 KW/Light	9.58	11.18

<u>High Pressure Sodium</u>				
5,800 Lumens (Approximately)		.083 KW/Light	\$ 5.54	\$ 8.16
9,500 "	"	.117 KW/Light	6.28	9.08
22,000 "	"	.242 KW/Light	9.36	12.16
50,000 "	"	.485 KW/Light	15.22	18.02

***Fluorescent

20,000 Lumens (Approximately)	.489 KW/Light	\$11.12	\$12.72
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**Incandescent restricted to those fixtures in service on October 12, 1982 (except for spot replacement)

***Fluorescent restricted to those fixtures in service on February 15, 1977.

C.O.L. (Customer Outdoor Lighting Rate)*

	<u>Load/Light**</u>	<u>Rate Per Lamp</u>
**2500 Lumen Incandescent Light	.201 KW/Light	\$ 5.75 per month
***3500 Lumen Mercury Vapor Light	.126 KW/Light	6.84 per month
***7000 Lumen Mercury Vapor Light	.207 KW/Light	7.90 per month

**Restricted to those fixtures in service on December 15, 1971.
***Restricted to those fixtures in service on October 12, 1982.

P.O.Lt.
Private Outdoor Lighting*

<u>RATE</u>	<u>Type Light</u>	<u>Approx. Lumens</u>	<u>KW Rating</u>	<u>Monthly Charge</u>
	Mercury Vapor	8,600	.214	\$ 7.91
	Mercury Vapor	22,000**	.468	9.60
	High Pressure Sodium	50,000**	.485	15.22

**Not available for urban residential home use.

Special Contract for Electric Service to
Green River Steel Corporation*

Demand Charge:

Non-Interruptible Demand	\$ 4.22 per KW
Interruptible Demand	1.97 per KW
Additional Demand	0.97 per KW

Plus an Energy Charge of:

A. For KWH used between 6 a.m. and 10 p.m., Monday-Friday, excluding holidays:

28.23 mills per KWH

B. For all KWH used at other hours:

26.82 mills per KWH used

Special Contract for Electric Service
to West Virginia Pulp & Paper Company*

Demand Charge:

Non-Interruptible	\$ 3.79 per KVA, but not less than 10,000 KVA
Interruptible	1.81 per KVA

Plus an Energy Charge of:

27.21 mills per KWH for all KWH used.

*An additional charge or credit will be made on the kilowatt - hours purchased by the customer in accordance with the fuel clause.

FUEL ADJUSTMENT CLAUSE

- (1) The charge per KWH delivered under the rate schedules to which this fuel clause is applicable shall be increased or decreased during each month in accordance with the following formula:

$$\text{Adjustment Factor} = \frac{F(m)}{S(m)} - \frac{F(b)}{S(b)}$$

where "F" is the expense of fossil fuel and "S" is the KWH sales in the base (b) and current (m) periods as defined in 807 KAR 5:056, all as set out below.

- (2) Fuel costs (F) shall be the most recent actual monthly cost of:
- (a) Fossil fuel consumed in the utility's own plants, plus the cost of fuel which would have been used in plants suffering forced generation or transmission outages, but less the cost of fuel related to substitute generation, plus
 - (b) The actual identifiable fossil and nuclear fuel costs associated with energy purchased for reasons other than identified in paragraph (c) below, but excluding the cost of fuel related to purchases to substitute the forced outages, plus
 - (c) The net energy cost of energy purchases, exclusive of capacity or demand charges (irrespective of the designation assigned to such transaction) when such energy is purchased on an economic dispatch basis. Included therein may be such costs as the charges for economy energy purchases and the charges as a result of schedule outage, all such kinds of energy being purchased by the buyer to substitute for its own higher cost energy; and less
 - (d) The cost of fossil fuel recovered through intersystem sales including the fuel costs related to economy energy sales and other energy sold on an economic dispatch basis.
 - (e) All fuel costs shall be based on weighted average inventory costing.
- (3) Forced outages are all nonscheduled losses of generation or transmission which require substitute power for a continuous period in excess of 6 hours. Where forced outages are not as a result of faulty equipment, faulty manufacture, faulty design,

- faulty installations, faulty operation, or faulty maintenance, but are Acts of God, riot, insurrection or acts of the public enemy, then the utility may, upon proper showing, with the approval of the Commission, include the fuel cost of substitute energy in the adjustment. Until such approval is obtained, in making the calculations of fuel cost (F) in subsection (2)(a) and (b) above, the forced outage costs to be subtracted shall be no less than the fuel cost related to the lost generation.
- (4) Sales (S) shall be all KWH's sold, excluding intersystem sales. Where, for any reason, billed system sales cannot be coordinated with fuel costs for the billing period, sales may be equated to the sum of (i) generation, (ii) purchases, (iii) interchange in, less (iv) energy associated with pumped storage operations, less (v) intersystem sales referred to in subsection (2)(d) above, less (vi) total system losses. Utility used energy shall not be excluded in the determination of sales (S).
 - (5) The cost of fossil fuel shall include no items other than the invoice price of fuel less any cash or other discounts. The invoice price of fuel includes the cost of the fuel itself and necessary charges for transportation of the fuel from the point of acquisition to the unloading point, as listed in Account 151 of FERC Uniform System of Accounts for Public Utilities and Licensees.
 - (6) Base (b) period shall be the month of July 1982, where $F(b) = \$17,719,227$ and $S(b) = 937,074,172$ KWH, pursuant to Case No. 8590.
 - (7) Current (m) period shall be the second month preceding the month in which the Fuel Clause Adjustment Factor is billed.